

SEQUENCE LISTING ~6590434.txt

<110> Merck Patent GmbH

<120> Variants of the major allergen Phl p 1 from timothy grass

<130> P 02/129

<140> EP 02 018 157.4

<141> 2002-08-19

<160> 2

<170> PatentIn version 3.1

<210> 1

<211> 723

<212> DNA

<213> Phleum pratense

<220>

<221> CDS

<222> (1), (720)

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~6590434.txt

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Glu	Ala	Cys	Ser	Gly	Glu	Glu	Pro	Val	Val	Val	His	Ile	Thr	Asp	Asp	Asn		
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gag	gag	ccc	atc	gcc	gcg	tac	cac	tcc	gac	ctc	tcc	ggc	atc	gcg	tcc			
Glu	Glu	Pro	Ile	Ala	Ala	Tyr	His	Phe	Asp	Leu	Ser	Gly	Ile	Ala	Phe			
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ggg	tcc	atg	gcc	aag	aag	ggc	gac	gag	cag	aag	ctg	cgc	agc	gcc	ggc			
Gly	Ser	Met	Ala	Lys	Lys	Gly	Asp	Glu	Gln	Lys	Leu	Arg	Ser	Ala	Gly			
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gag	gtg	gag	atc	cag	tcc	cgc	cgc	gtc	aag	tgc	aag	tac	ccg	gag	ggc			
Glu	Val	Glu	Ile	Gln	Phe	Arg	Arg	Val	Lys	Cys	Lys	Tyr	Pro	Glu	Gly			
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acc	aag	gtg	acc	ttc	cac	gtg	gag	aag	ggg	tcc	aac	ccc	aac	tac	ctg			
Thr	Lys	Val	Thr	Phe	His	Val	Glu	Lys	Gly	Ser	Asn	Pro	Asn	Tyr	Leu			
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gcg	ctg	ctg	gtg	aag	ttt	gtc	gcc	ggc	gac	ggc	gac	gtg	gtg	gcf	gtg			
Ala	Leu	Leu	Val	Lys	Phe	Val	Ala	Gly	Asp	Gly	Asp	Val	Val	Ala	Val			
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gac	atc	aag	gag	aag	ggc	aag	gac	aag	tgg	atc	gcf	ctc	aag	gag	tcg			
Asp	Ile	Lys	Glu	Lys	Gly	Lys	Asp	Lys	Trp	Ile	Ala	Leu	Lys	Glu	Ser			
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tgg	gga	gcc	atc	tgg	agg	atc	gac	acc	ccg	gag	gtg	ctc	aag	ggc	ccc			
Trp	Gly	Ala	Ile	Trp	Arg	Ile	Asp	Thr	Pro	Glu	Val	Leu	Lys	Gly	Pro			
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ttc	acc	gtc	cgc	tac	acc	acc	gag	ggc	ggc	acc	aag	ggc	gag	gcc	aag			
Phe	Thr	Val	Arg	Tyr	Thr	Thr	Glu	Gly	Gly	Thr	Lys	Gly	Glu	Ala	Lys			
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gac	gtc	atc	ccc	gag	ggc	tgg	aag	gcc	gac	acc	tgc	tac	gag	tcc	aag			
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Gly	Pro	Lys	Asp	Asn	Gly	Gly	Ala	Cys	Gly	Tyr	Lys	Asp	Val	Asp	Lys			
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Ser Gly Arg Gly Cys Gly Ser Cys Phe Glu Ile Lys Cys Thr Lys Pro
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Glu Glu Pro Ile Ala Ala Tyr His Phe Asp Leu Ser Gly Ile Ala Phe
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115 120 125

Glu Val Glu Ile Gln Phe Arg Arg Val Lys Cys Lys Tyr Pro Glu Gly
130 135 140

Thr Lys Val Thr Phe His Val Glu Lys Gly Ser Asn Pro Asn Tyr Leu
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Ala Leu Leu Val Lys Phe Val Ala Gly Asp Gly Asp Val Val Ala Val
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Asp Ile Lys Glu Lys Gly Lys Asp Lys Trp Ile Ala Leu Lys Glu Ser
180 185 190

Trp Gly Ala Ile Trp Arg Ile Asp Thr Pro Glu Val Leu Lys Gly Pro
195 200 205

Phe Thr Val Arg Tyr Thr Thr Glu Gly Gly Thr Lys Gly Glu Ala Lys
210 215 220

Asp Val Ile Pro Glu Gly Trp Lys Ala Asp Thr Cys Tyr Glu Ser Lys
225 230 235 240